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10/791,189	03/01/2004	Charles John Call	MESO0070	3193

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EXAMINER

RAMILLANO, LORE JANET

ART UNIT	PAPER NUMBER
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1743

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/791,189

Applicant(s)

CALL ET AL.

Examiner

Lore Ramillano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-16 and 21-45 is/are pending in the application.
- 4a) Of the above claim(s) 8-16,25-28 and 39-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,21-24,29-38 and 43-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/11/06,12/19/06
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. In applicant's reply filed on 9/13/06, applicant amended claims 1, 3-16, 21-29, cancelled claims 17-20; and added new claims 29-45.

Election/Restrictions

2. Newly submitted claims 39-42 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: examiner has determined that new claims 40-42 should be grouped with the claims in Group II because they depend on non-elected claim 8 and new claim 39 should be grouped with the claims in Group II because it depends on non-elected claim 25, which is distinct from the invention of Group I for the reasons stated below. Therefore, new claims 39-42 are withdrawn without consideration.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 39-42 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3. Applicant's election with traverse of Group I, claims 1, 3-7, and 21-24 in the reply filed on 9/13/06 is acknowledged. The traversal is on the ground(s) that there is no basis for restricting the claims of Groups I and II because examiner erred in making the restriction based on combination and subcombination. This is not found persuasive because the inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant

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case, the combination as claimed does not require the particulars of the subcombination as claimed because Invention I does not require a fluorescence detector. The subcombination has separate utility such as a detector using MALDI spectrometry.

Inventions I-II and III (cancelled claims) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions have different modes of operation and effects. Invention I-II are not alarm systems, they are merely detection devices.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

The requirement is still deemed proper and is therefore made FINAL.

Accordingly, claims 8-16 and 25-28 are withdrawn from consideration as being directed to a non-elected invention.

Response to Amendment

4. The rejections over the prior art are withdrawn. New rejections follow.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 7 and 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 7 is indefinite because it cannot be determine^d how the biological signature is different from the detector limitations recited in claim 5. Is the biological signature the same as the detector?

Claim 24 is indefinite because it contains "autofluorescence" which is also recited in claim 23. Examiner recommends amending claim 24.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1, 4-6, and 32-34** are rejected under 35 U.S.C. 102(b) as being anticipated by Allen (US 4987286).

Allen discloses a device comprising: a regenerable collection surface; a surface regenerator configured to remove particles from the regenerable collection surface; a detector capable of sensing a biological signature in the spot; a liquid coating applicator; and a mechanical homing sensor that positions the regenerable collection surface relative to the detector (i.e. column 7, line 43 to column 8, line 17).

9. **Claims 21-24 and 37-38** are rejected under 35 U.S.C. 102(b) as being anticipated by Call et al. ("Call," US Pub. No. 2002/0124664).

Call teaches a method comprising: depositing airborne particles on a regenerable collection surface, measuring a biological signature present in the particles comprising the spot, determining a concentration of the immobilized airborne biological particles, regenerating the regenerable collection surface by removing particles from the regenerable collection surface (i.e. [0111]-[0121]); and activating an alarm if the concentration of particles equals or exceeds the predetermined criteria (i.e. [0187]).

Call further teaches: the step of depositing results from an inertial impaction of the particles on the regenerable collection surface (i.e. [0144]); that the biological signature is an autofluorescence (i.e. [0189]); and directing a stream of high velocity air towards the regenerable collection surface to dislodge the particles deposited on the regenerable collection surface (i.e. [0122]).

10. **Claims 1, 4-6, and 32-34** are rejected under 35 U.S.C. 102(e) as being anticipated by Uziel et al. ("Uziel," US 6949147).

Uziel discloses a device comprising: a regenerable collection surface; a surface regenerator configured to remove particles from the regenerable collection surface; a detector capable of sensing a biological signature in the spot; a liquid coating applicator; and a mechanical homing sensor that positions the regenerable collection surface relative to the detector (i.e. column 6, lines 1-11; and Fig. 9).

11. **Claims 1, 4-6, 32-34, and 43-44** are rejected under 35 U.S.C. 102(e) as being anticipated by Uziel (US 6908567).

Uziel discloses a device comprising: a regenerable collection surface; a surface regenerator configured to remove particles from the regenerable collection surface; a detector capable of sensing a biological signature in the spot; a liquid coating applicator; a mechanical

homing sensor that positions the regenerable collection surface relative to the detector (i.e. column 2, lines 40-51); and a particle counter (i.e. Fig. 9).

12. **Claims 1, 4-6, and 32-34** are rejected under 35 U.S.C. 102(e) as being anticipated by Allen (US 6805751).

Allen discloses a device comprising: a regenerable collection surface; a surface regenerator configured to remove particles from the regenerable collection surface; a detector capable of sensing a biological signature in the spot; a liquid coating applicator; and a mechanical homing sensor that positions the regenerable collection surface relative to the detector (i.e. column 2, lines 40-51).

13. **Claims 1, 3-7, 32 and 33** are rejected under 35 U.S.C. 102(e) as being anticipated by Bryden et al. ("Bryden," WO 03/089907 A1).

Bryden discloses a device comprising: a regenerable collection surface, which is part of an impaction plate (i.e. 26, fig. 2, [0035]); a surface regenerator (i.e. [0033]) configured to remove particles from the regenerable collection surface; a detector (i.e. [0027]) capable of sensing a biological signature in the spot.

Bryden further discloses the following: a spotting nozzle configured to direct an air stream towards the regenerable collection surface (i.e. 36, fig.2); means for directing energy to the particles collected upon the regenerable collection surface to dislodge particles deposited thereon; means for directing energy to the regenerable collection surface to dislodge particles deposited thereon (i.e. [0005]); a liquid coating applicator configured to moisten the regenerable collection surface prior to collecting particles, thereby enhancing a collection efficiency of the regenerable collection surface (i.e. [0005]); and a MALDI mass spectrometer (i.e. [0027]).

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14. **Claims 1, 3-7, 29-30, 33-36, and 43-45** are rejected under 35 U.S.C. 102(e) as being anticipated by Murray et al. ("Murray," WO 03/089661 A1).

Murray discloses a device comprising: a regenerable collection surface, which is part of an impaction plate (i.e. [0036]); a surface regenerator (i.e. [0037], [0039]) configured to remove particles from the regenerable collection surface; a detector (i.e. [0040]) capable of sensing a biological signature in the spot.

Murray further discloses the following: a spotting nozzle configured to direct an air stream towards the regenerable collection surface (i.e. 36, fig.2); a fluorescence detector, further comprising an excitation light source configured to emit excitatory radiation that is directed towards the particles collected upon the regenerable collection surface (i.e. [0040]); a biological signature consisting of an autofluorescence (i.e. [0040]); a dichroic mirror that substantially reflects the excitatory radiation (i.e. fig. 3, [0041]-[0044]); an excitation filter disposed between the excitation light source and the dichroic mirror; an emission filter disposed between the dichroic mirror and the fluorescence detector (i.e. fig. 3, [0041]-[0044]); a liquid coating applicator configured to moisten the regenerable collection surface prior to collecting the particles (i.e. [0036]-[0037]); producing an alarm signal (i.e. [0050]); a processor configured to activate an air analysis device to obtain and analyze a sample of particles from the same general volume of air that provided the particles originally deposited on the regenerable collection surface (i.e. [0050]); a particle counter (i.e. [0052]); and adjacently positioned aerosol sampler and an adjacently positioned aerosol analyzer (figs. 2 and 3).

Claim Rejections - 35 USC § 103

15. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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16. **Claim 31** is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryden in view of Lin et al. ("Lin," US 6193587).

The disclosure of Bryden is indicated above. Bryden does not specifically disclose having a brush that regenerates the regenerable collection surface. Lin discloses an apparatus for cleaning particles from the surface of a polishing pad (i.e. column 5, lines 13-15). It would have been obvious to a person of ordinary skill in the art to modify Bryden's surface regenerator by incorporating a brush as an alternate or additional means for removing particles from the regenerable collection surface because it ensure that the excess fluid and/or airborne particles accumulated on the regenerable collection surface are removed from the regenerable collection surface before another new batch of airborne particles impinge upon the regenerable collection surface.

Double Patenting

17. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

18. Claims 1 and 21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 44 and 45 of copending Application No. 10/791057. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both recite substantially the same subject matter.

Claims 1 and 21 recite substantially the same subject matter as recited in the copending Application claims – claim 1 recites substantially the same subject matter as claim 44 of copending Application; and claim 21 recites substantially the same subject matter as claim 45 of copending Application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

19. Applicant's arguments with respect to claims 1, 3-7, 21-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lore Ramillano whose telephone number is (571) 272-7420. The examiner can normally be reached on Mon. to Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lore Ramillano
Examiner
Art Unit 1743


Jill Warden
Supervisory Patent Examiner
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